

A new *Micropterix* species from northern Italy (Micropterigidae)

Michael KURZ*, Marion KURZ* & Christof ZELLER-LUKASHORT**

* Sportplatzstrasse 23, A-5303 Thalgau, Austria

** Unterdorf 118, A-5303 Thalgau, Austria

Summary

Micropterix renatae sp. n. is described from the province of Tuscany (northern Italy) and compared with its closest relatives, i.e. *Micropterix uxoria* Walsingham, 1919, *Micropterix ertella* Walsingham, 1919 and *Micropterix italica* Heath, 1981. The new species is well characterized by the structure of the male genitalia.

Zusammenfassung

Aus der Toskana (Norditalien) wird *Micropterix renatae* sp. n. beschrieben und mit ihren nächsten Verwandten verglichen. Dies sind *Micropterix uxoria* Walsingham, 1919, *Micropterix ertella* Walsingham, 1919 und *Micropterix italica* Heath, 1981. Die neue Art ist sehr gut durch den Genitalapparat des Männchens charakterisiert.

Résumé

Micropterix renatae sp. n. est décrit de Toscane (Italie du Nord) et comparé aux espèces les plus apparentées, à savoir *Micropterix uxoria* Walsingham, 1919, *Micropterix ertella* Walsingham, 1919 et *Micropterix italica* Heath, 1981. La nouvelle espèce est bien caractérisée par la structure des genitalia mâles.

Introduction

Italy is well known for its many endemic species of the genus *Micropterix* Hübner, [1825]. During the last decades many species of this genus have been newly described (cf. Viette, 1951 ; Heath, 1960, 1963, 1965, 1981 ; Heath & Kaltenbach, 1984), so that up to the present Italy is one of the best investigated countries concerning Micropterigidae.

On a trip to the northern Apennines in 1993 we have concentrated primarily on collecting Micropterigidae and Psychidae. Astonishingly, besides two probably undescribed species of Psychidae, a series of 7 ♂♂ and one ♀ of a hitherto unnamed species of *Micropterix* has been found in the Province of Tuscany (near the border to Romagna). Although very similar in wing pattern to other Italian species of the genus and therefore at first assumed to be *Micropterix italica* Heath, 1981, it is clearly separable from these by characters of the male genitalia.

Males of *Micropterix uxoria* Walsingham, 1919 and *Micropterix ertella* Walsingham, 1919, labelled as lectotypes in The Natural History Museum, London (BMNH ; designation not yet published) have been investigated as well for comparative purpose. It turned out that both taxa are virtually indistinguishable in the characters of the male genitalia, whereas the external differences in the extension of the silvery fasciae may be subject to variation. For this reason we only refer to *Micropterix ertella* in the diagnosis. Due to the lack of further material a detailed analysis of these two species must await further studies.

***Micropterix renatae* sp. n.**

HOLOTYPE : ♂ : n. Apennin ; Alpi Apuane ; Castelnuovo/Arni [44°05' N, 10°23' E] ; 600–800 m ; 14.V.1993 pm ; leg. H/Z/K (genitalia preparation 628 M. Kurz) ; coll. M. Kurz

PARATYPES : 6 ♂♂, 1 ♀ : same data (genitalia preparation 602 M. Kurz) ; coll. Tiroler Landesmuseum Ferdinandeum (Innsbruck), C. Zeller and M. Kurz

DESCRIPTION. *Adult* (Fig. 1). Forewing length : ♂♂ 2.7–3.1 mm ; ♀ 3.3 mm ; wing expanse : ♂♂ 5.8–6.4 mm ; ♀ 7.0 mm. Head dirty to rusty yellow ; antennae approximately 3/4 (male) or 2/5 (female) of forewing length, golden fuscous. Thorax and tegulae dark bronzy golden, apically purplish, sometimes with single bluish scales ; forewings bronzy to reddish-golden, apically slightly tinged purplish ; base of costa purple ; wing markings silvery white : a narrow straight fascia at about 1/4, especially in female not quite reaching costa ; a similar, sometimes slightly irregular fascia at about 1/2 over the whole width of the wing ; at 3/4 a more or less pear-like diagonal costal spot, extending almost to centre of wing ; cilia bronzy grey, basally purple-tinged, apically whitish-golden ; hindwing deep bronzy golden, more or less tinged purplish (especially apically) ; cilia bronzy golden ; abdomen golden fuscous.

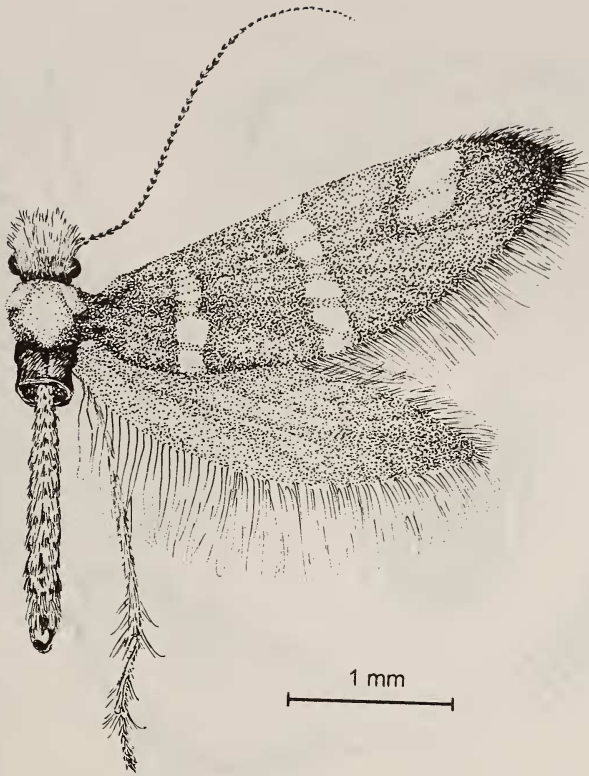


Fig. 1 : Male (paratype) of *Micropterix renatae* sp. n.

Male genitalia (Fig. 2) ($n = 2$). Uncus (medial lobe of the segment IX ring) long and fairly slender with broad rounded tip ; beyond uncus a slightly sclerotized, hairy structure ; accessory clasper on inner surface with a marginal series of 10-13 long stout setae and a group of about 20 moderately long, partly sickle-shaped setae ; a small lobe, situated on each side of the posterior margin of the segment IX ring between the base of the valva and the accessory clasper ; valva moderately long, narrow in the middle and distinctly spatulate at the distal end ; on the inner surface with a postbasal irregular group of more than 10 short, fine setae and an irregular group of moderately long stout setae in the distal part ; aedeagus typical for the genus, without cornuti.

Due to the persisting problems in preparing female genitalia of specimens of the genus *Micropterix*, no attempt has been made to prepare the genitalia of the single available female of the new species.

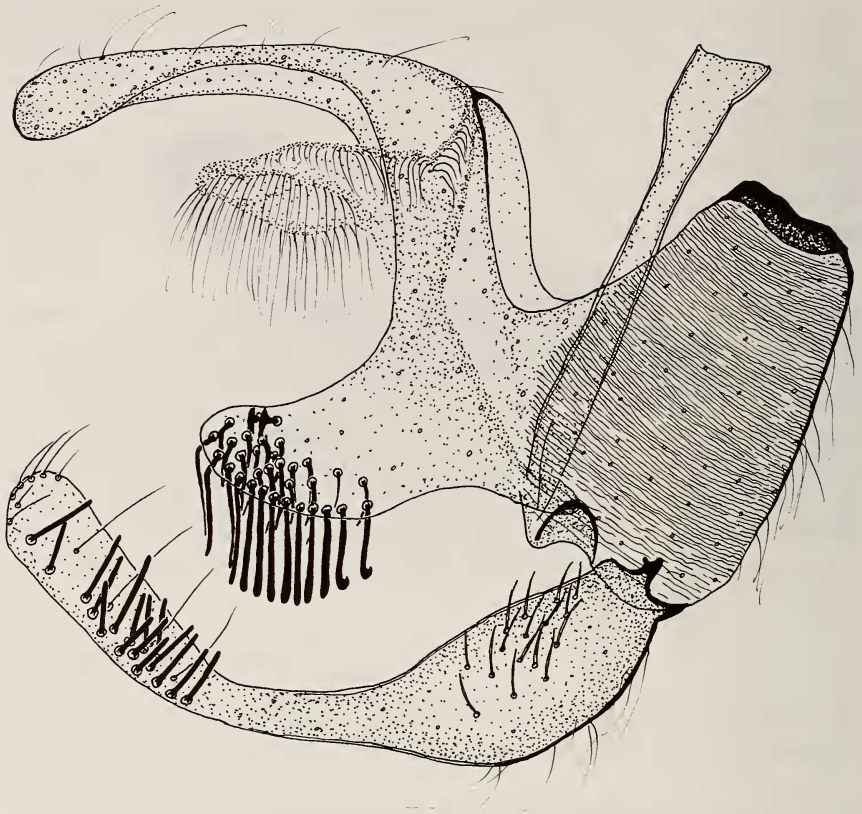


Fig. 2 : Male genitalia of *Micropterix renatae* sp. n. ;
holotype ; genitalia preparation 628, M. Kurz

DIAGNOSIS. Externally the new species is quite well separated from most other *Micropterix* species by the combination of the reddish-golden forewings with silvery fasciae, the fascia at one-quarter being reduced near the costa. *M. renatae* sp. n. seems to be closely related to *M. ertella*, *M. uxor* and *M. italica*, being separable with certainty only by the characters of the male genitalia. It differs from these species in the shape of the dorsal part of the segment IX ring (uncus-tegumen-complex) and the accessory claspers, both being more slender in *M. renatae* sp. n., the more numerous setae on the accessory claspers (more than 30 in *M. renatae* sp. n., about 20 or less in the other species) and the shape of the valvae (cf. figs. 2 and 3), being distinctly more

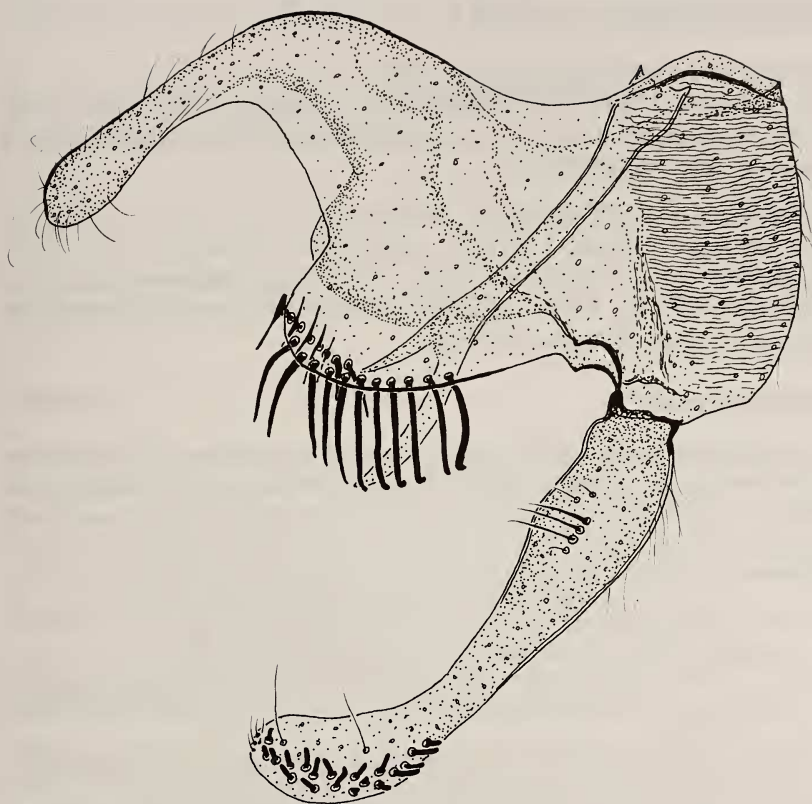


Fig. 3 : Male genitalia of *Micropterix uxoria* Walsingham, 1919 ; GU 7079, BMNH

spatulate in the new species. Furthermore the postbasal setae on the inner surface of the valva are more numerous in *M. renatae* sp. n. (more than 10) than in *M. italica* (8) and *M. ertella* (3).

DISTRIBUTION. To our present knowledge, *M. ertella* and *M. uxoria* are restricted to Sicily, *M. italica* inhabits southern Italy (province of Campania), whereas *M. renatae* sp. n. dwells within the range of the northern Apennines. Material (females) from Tuscany and Romagna identified by Heath (1981) as *M. italica*, but excluded from the type series of that species, most probably belongs to *M. renatae* sp. n.

ETYMOLOGY. The new species is named in honour of Miss Renate Hausenblas, who has proved to have a great feeling for finding unexpected specimens.

Further type material examined

Micropterix ertella Walsingham, 1919

1 ♂ : Palermo 13.III.1918 ; labelled as "Lectotype" ; GU 7082 ; coll. British Museum (Natural History), London [now The Natural History Museum, London] (BMNH)

Micropterix uxoria Walsingham, 1919

1 ♂ : Taormina, Sicilia, 1.V.1918 ; labelled as "Lectotype" ; GU 7079 ; coll. BMNH ; 1 ♀ : Sicilia s. Cefalù, 22.4.1982, J. Klimesch (genitalia preparation 522 M. Kurz) ; ex coll. J. Klimesch, now in Zoologische Staatssammlung, München (ZSSM)

Acknowledgements

We are grateful to Dr. Klaus Sattler, London for his most valuable hints and to the late Dr. Josef Klimesch, Linz for the loan of the female of *M. uxoria*.

References

- HEATH, J., 1960. Two new species of *Micropterix* (Lepidoptera : Micropterygidae). *Boll. Soc. ent. Ital.* 90 (7-8) : 129-133.
- HEATH, J., 1963. A new species and a new form of *Micropterix* (Lepidoptera Zeugloptera : Micropterygidae). *Memorie Mus. civ. Stor. nat. Verona* 11 : 129-132.
- HEATH, J., 1965. A new species of *Micropterix* (Lepidoptera Zeugloptera : Micropterygidae). *Atti. Soc. ital. Sci. nat.* 104 (II) : 243-245.
- HEATH, J., 1981. Three new species of *Micropterix* Hübner (Lepidoptera, Zeugloptera : Micropterygidae) from Italy. *Entomologist's Gaz.* 32 : 225-229.
- HEATH, J. & KALTENBACH, T., 1984. New species of *Micropterix* Hübner (Lepidoptera ; Zeugloptera : Micropterygidae) from Italy and Yugoslavia. *Entomologist's Gaz.* 35 : 21-23.
- VIETTE, P., 1951. Contribution à l'étude des *Micropterygidae* (6^e note). Description d'une nouvelle espèce [Lep.]. *Bull. Soc. ent. Fr.* 55(1950) : 135-138.
- WALSINGHAM, LORD, 1919. New Species of *Aristotelia* and *Micropterix*. *Entomologist's Rec. J. Var.* 31 : 10-12.